

24



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,750	01/16/2002	Wai William Wang	39524.1000	7722
20322	7590	02/15/2005	EXAMINER	
SNELL & WILMER ONE ARIZONA CENTER 400 EAST VAN BUREN PHOENIX, AZ 850040001			PATEL, GAUTAM	
			ART UNIT	PAPER NUMBER
			2655	

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/050,750

**Applicant(s)**

WANG ET AL.

**Examiner**

Gautam R. Patel

**Art Unit**

2655

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)):
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/3/02 & 12/17/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-5 and 7 are pending for the examination.

### Election/Restriction

2. Claims 6 is withdrawn from further consideration by the examiner, 37 C.F.R. § 1.142(b) as being drawn to a non-elected method. Election was made **without traverse** in Paper dated 5-6-04.

### Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

### Content of Specification

4. The disclosure is objected for following reasons.

Specification needs to be updated with respect to information on the related applications. Cross-References to Related Applications: See 37 C.F.R. § 1.78 and section 201.11 of the M.P.E.P.

This application does not contain an Abstract of the Disclosure as required by 37 C.F.R. § 1.72(b). An Abstract on a separate sheet is required.

Applicant is reminded of the *proper language* and *format* of an Abstract of the Disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the **range of 50 to 150 words**. It is important that the **abstract not exceed 150 words in length** since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said", should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," *etc.*

In the present Application, in the abstract is too long.

Corrections are required.

**Claim Rejections - 35 U.S.C. § 102**

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 4 are rejected under 35 U.S.C. § 102(b) as being anticipated by Bletscher, Jr. et al., US. patent 5,070,495 (hereafter Bletscher).

As to claim 1, Bletscher discloses the invention as claimed, an optical power calibration method [see Figs. 1-8, especially 4 and 6] including providing data to be written, determining a writing location of the data, and performing an optical power calibration process, comprising the steps of:

providing data to be written [col. 5, lines 4-13];  
determining a writing location of the data [col. 8, lines 1-8];  
performing an optical power calibration process in the first power calibration area when the writing location being within a predetermined portion of the data storage area; and  
performing an optical power calibration process in the second power calibration area when the writing location being out of the predetermined portion [col. 8, lines 45-60].

6. The aforementioned claim 2, recites the following steps, inter alia, disclosed in Bletscher:  
data storage area is divided into an inner area [fig. 4, area 110] and an outer area [fig. 4, area 114], and the predetermined portion is the inner area, when the writing location is located within the inner area, performing the optical power calibration process in the first power calibration area, and when the writing location is located in the outer area, performing the optical power calibration process in the second power calibration area [col. 10, lines 15-34 and col. 10, line 55 to col. 11, line 14].

7. The aforementioned claim 4, recites the following steps, inter alia, disclosed in Bletscher:

the carrier player controls rotation of the optical storage carrier in a constant angular velocity (CAV) [constant rotational speed] manner [col. 8, lines 9-26].

### **Claim Rejections - 35 U.S.C. § 103**

8. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 3 and 5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bletscher as applied to claims 1-2 above in view of Suga et al., US. patent 6,418,102 (hereafter Suga).

As to claim 3, Bletscher discloses all of the above elements, including a multiple power calibration locations at a constant rotational speed or CAV. Bletscher does not specifically disclose that the speed can also be controlled in a linear velocity (CLV) manner to the extent claimed.

However, controlling speed in CAV and CLV manner has been known in the art for a very long time. Also Suga clearly discloses:

the carrier player controls rotation of the optical storage carrier in a constant linear velocity (CLV) manner [Fig. 6B and col. 8, line 53 to col. 9, line 20].

Both Bletscher and Suga are interested in improving the laser power calibration method in an optical disk device. Both shows different area for power calibration.

One of ordinary skill in the art at the time of invention would have realized that the in recent years, there has been a clear trend for a faster transmission than the standard transmission

rate with respect not only to playback of an optical disk but also to recording and faster more accurate recording will be a good feature to have in the system of Bletscher.

Therefore, it would have been obvious to have also used a CLV manner of speed control [along with CAV manner] in the system of Bletscher as taught by Suga because one would be motivated to record data even at the CLV manner of speed control and make system faster and more accurate for CLV formatted disks, thus increasing the versatility of system [col. 1, lines 58-63 and col. 2, lines 4-12; Suga].

10. The aforementioned claim 5, recites the following steps, inter alia, disclosed in Suga:  
the data storage area comprises two data segments, and the carrier player controls rotation of the optical storage carrier in a constant linear velocity (CLV) manner when the access device writing data onto one data segment, and each data segment having a different linear velocity [Fig. 6A and 6B and col. 8, line 53 to col. 9, line 20 and col. 1, lines 36-63].

11. Claim 7 is are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bletscher as applied to claims 1-2 above, and further in view of Ikeda et al., US. patent 6,067,284 (hereafter Ikeda).

As to claim 7, Bletscher discloses all of the above elements, including a multiple power calibration locations at a constant rotational speed, including location of 114, which is close to outer edge. Bletscher does not specifically discloses that the location is last possible lead-out area to the extent claimed.

However, locating PCA in the lead-in are is well known [as shown by Bletscher] and also based on the Orange Book standard has been known in the art for a very long time.

Also Ikeda clearly discloses:

the optical storage carrier further comprises a last possible lead-out area located close to the outer edge [fig. 17, area 238] of the optical storage carrier for storing ending information about data written on the optical storage carrier, and the second power calibration area is located within the last possible lead-out area [col. 18, lines 4-26 and Figs. 17 to 18B].

Both Bletscher and Ikeda are interested in improving the laser power calibration method in an optical disk device. Both shows different area for power calibration.

One of ordinary skill in the art at the time of invention would have realized that different locations on the disk require different speeds and calibrating power with respect to location will be a good feature to have in the system of Bletscher.

Therefore, it would have been obvious to have also used a lead-out area of power calibration in the system of Bletscher as taught by Ikeda because one would be motivated to calibrate the data which is location specific and thus improve accuracy of recording and hence playback in the system, especially high density recording environment of modern system.

### **ALTERNATE REJECTION**

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-5 and 7 are rejected under 35 U.S.C. § 102(e) as being anticipated by Seong et al., US. patent 6,728,177 (hereafter Seong).

Seong discloses all the limitation as presented in claims 1-5 and 7 [ABSTRACT; Fig. 4 and col. 3, line 51 to col. 5, line 65].

### **Other prior art cited**

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Kuroda et al. (US. Patent 5,818,807)
- b. Chao et al. (US. patent 6,711,107) "System for constant .....".
- c. Thanos et al. (US. patent 5,005,089) "High performance ....".

**NOTE: Thanos discloses calibration in innermost AND outermost track regions.**  
[col. 4, lines 35-53].

Art Unit: 2655

- d. Miyata (US. patent 6,052,347) "Method and apparatus for detecting optimum power recording for an optical disk". **NOTE: Discloses TWO areas for power calibration [area 11 and 15].**

**Contact Information**

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is (703) 308-7940. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is (703) 872-9314.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To can be reached on (703) 305-4827.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-4700 or the group Customer Service section whose telephone number is (703) 306-0377.



**GAUTAM R. PATEL  
PRIMARY EXAMINER**

Gautam R. Patel  
Primary Examiner  
Group Art Unit 2655

February 9, 2005